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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/289,550	04/09/1999	RICHARD W. FRIESEN	3854	8747

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EXAMINER
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KYLE, CHARLES R

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/289,550

Applicant(s)

FRIESEN ET AL.

Examiner

Charles R Kyle

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MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18,28,32 and 59-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18,28,32 and 59-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 33.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

Rejections under 35 U.S.C. 101 of the prior office action are withdrawn based on Applicants' amendment.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 62 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It recited the phrase "distinguishing the order icon from the plurality of bid and ask indicators". In the financial trading art, an order is understood to be a bid or an offer. The claim phrasing suggests that the bid indicators or offer indicators are distinguished from themselves, which is confusing. The Claim has been examined to the best of the Examiner's ability given the lack of clarity.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 4-9, 12 and 16-17** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by *Silverman et al.*

**Concerning Claim 1**, *Silverman* discloses the invention as claimed including in a computer based (Disclosure of the Invention) method for displaying transactional information regarding the buying and selling of items (Abstract; Fig 18, “4”) in a system where orders comprise a bid type or an offer type (Figs. 4 and 18, “Bid Side” and Offer Side”), and an order is generated for a quantity of items at a specific value (Fig, 4, lower left hand box denoting “Value” and “Primary Quantity”), the method comprising:

Displaying a plurality of bid icons each corresponding to a bid for a quantity of items (Fig 4, eles. 73, 75, 77), each bid at a location along a first axis of values corresponding to the value of the bid (Fig 4., “Absolute Value” axis), including bids having different values (Fig. 4, elements 73 and 82); and

Displaying a plurality of offer icons each corresponding to an offer for a quantity of items (Fig 4, eles. 94, 96, 98), each bid at a location along a first axis of values corresponding to the value of the bid (Fig 4., “Absolute Value” axis), including bids having different values (Fig. 4, elements 88 and 100).

**With respect to Claim 4**, *Silverman* discloses order icons containing quantity and value information at Fig. 4, lower left hand box denoting “Value” and “Primary Quantity”

**As to Claim 5**, *Silverman* discloses bid slots at Fig 4, elements 73, 75, 77.

**Concerning Claim 6**, *Silverman* discloses rearrangement of bid icons at Fig. 13.

**As to Claims 7 and 9**, *Silverman* discloses sequencing by time (“Time Order of Offers/Bids, Fig 4.) and value (Absolute Value Axis, Fig. 4).

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**As to Claim 8**, *Silverman* discloses horizontal placement of bid icons. It is inherent that the same information is provided as would be provided by vertical placement.

**Regarding Claims 12 and 16**, see the discussion of Claim 1 above. These Claims also recite the processes of receiving orders and generating icons for new bids or offers, which is taught by *Silverman* at Figs. 4, 14 and 16.

**Regarding Claim 17**, see above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 10, 11 and 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Silverman*.

**With respect to Claim 10**, *Silverman* discloses the invention substantially as claimed. See the discussions set forth above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have distinguished a bidder's icon with a visual characteristic so that a bidder could understand where he/she stood in the bidding with respect to other bidders' and could understand market trends.

**With respect to Claim 11**, *Silverman* discloses high and low price information at Fig. 4. The use of an angled edge would provide such information and is read as functionally equivalent.

**As to Claim 13**, it recites language describing the matching of a bid with an offer and the completion of a trade. It would have been obvious to one of ordinary skill in the art at the time of the invention to have removed an offer icon when a trade for that offer was completed because this would have avoided confusion and contention among multiple traders each thinking that he or she had completed the trade for an unremoved yet already sold offer icon. Further, if a trade were completed for a particular offer the remaining available quantity of items from that offer would be zero, thus implying an icon size also of zero.

**Concerning Claims 14 and 15**, they describe the matching of bids and offers which are unequal and the display of a “remainder” icon representing items not traded in a partial trade of unequal bids and offers. It would have been obvious to one of ordinary skill in the art at the time of the invention to make provision for such partial trades by representing the trade “remainder” in a proportionally sized icon for a bid or offer because this would have expedited the trade of the total order by trading it in parts.

**Claims 2-3 and 59-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Silverman* in view of *Schott*.

**As to Claim 2**, *Silverman* discloses the invention substantially as claimed. See the discussion of Claim 1 above. *Silverman* does not specifically disclose icons adjustable for size based on order size, although the order size data is inherent in his displayed order icons at Fig. 4. *Schott* discloses manipulation of similar data through user manipulation of size to reflect quantity. See Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the user manipulation of underlying data disclosed by

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*Schott* in the invention of *Silverman* because this would have allowed a user to understand the relative size of orders through greater or lesser visual impact based on user controlled size.

**As to Claim 3**, *Silverman* discloses positioning an icon to imply its value at Fig. 4, positioning of bid and offer icons on a vertical axis with indicated prices.

**Concerning Claim 59**, *Silverman* discloses the invention substantially as claimed, including in a computer-based method for placing an order regarding buying and selling of items where orders comprise a bid type or an offer type (Col. 1, line 29 to Col. 2, line 63), and an order is generated by a user for a quantity of items at a specific value (Figs. 4 and 5), the steps of:

Displaying an order icon representing the order for a particular quantity of an item (Figs. 4, 5).

*Silverman* does not specifically disclose moving the order icon to a location associated with a value on an axis in response to a user initiated command. *Schott* discloses such icon manipulation at Col. 3, lines 20-25 and Col. 20, line 60 to Col. 21, line 28. See also Figs. 10 and 19a. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the order placement system of *Silverman* with the addition of manipulatable icons disclosed by *Schott* because this would have allowed creation of dynamic representations of orders, reconfiguration of the graphical representations according to manipulation of the graph and simple and easy modification underlying order data.

**Concerning Claim 60**, *Silverman* discloses bid and offer indicators as set forth in the discussion of Claim 1.

**As to Claim 61**, bid and ask indicators are visually distinguished as being in different bid and offer columns in the display.

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**With respect to Claim 62**, see the discussion of Claim 61.

**With respect to Claim 63**, it would have been obvious to modify *Silverman* with a marker denoting a value of interest because this would draw a trader's attention to a need to perform some important action. For example, a trader might wish to have a particular price identified on an axis as a reminder to trade at that particular price.

**As to Claim 64**, *Silverman* discloses dynamic updating of price and therefore icon position at Col. 4, lines 11-17.

**Concerning Claim 65**, *Schott* discloses selecting and dragging of an order icon at Col. 21, lines 1-30.

**Concerning Claim 66**, at Fig. 17, *Silverman* discloses modification of an order icon based on a transaction as the matching of a ten item bid with two offers comprising nine units. The modified icon would be a remainder bid of one unit. See also Col. 17, lines 36-47.

**Concerning Claim 67**, *Schott* discloses increased size related to quantity of an icon at Fig. 19a and Col. 21, lines 1-30.

**Concerning Claim 68**, *Silverman* discloses values on an axis at Fig. 4, "Lowest" to "Highest".

**As to Claim 69**, *Silverman* discloses trading a commodity at Col. 1, lines 59-62.

**Claims 28 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Silverman* in view of *Sacerdoti et al.*

**As to Claim 28**, *Silverman* teaches the invention substantially as claimed including an electronic trading system having orders and receipt of information for those orders, including a



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value axis, which information is displayed. See the discussion of Claim 1 for detailed reference. *Silverman* does not specifically disclose a quantity axis and display of icons with respect to the axis. *Sacerdoti* discloses this feature at Figs. 4, 5 and 8. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the display of icons with respect to quantity axis because this would have provided additional information. A motivation to combine the teachings of the references is given by *Sacerdoti et al* at Col. 1, lines 20-64 as common subject matter of trading.

Also of note are the facts that *Sacerdoti et al* teach the features of icon size corresponding to quantity, bar graphs etc. (Col. 7, lines 36-45) and user adjustment of icon size to reflect quantity (Summary of the Invention). These features are recited in other claims rejected over other art.

Applicants have amended to recite placement of an order in accordance with value and quantity, which is disclosed by *Silverman* at Col. 6, line 61 to Col. 7, line 13.

**As to Claim 18**, see the discussion of Claim 28 above. *Silverman* and *Sacerdoti* do not specifically disclose a third axis representing historical activity of the market. This additional limitation is read to be like the bar chart representation of stock market activity, which is old and well-known in trading markets. The presentation of such historical information would have been obvious because this would have allowed traders to gain understanding of market trends.

**As to Claim 32**, *Silverman* discloses the invention as claimed, including in a method of displaying trading activity of a plurality of traders (Fig. 4, elements 73, 75, 77 and 94, 96, 98), the steps of:

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Displaying a trading pit (Fig. 4, “Central station Book”);

Determining for each trader an activity level (Fig. 4, Icon “Primary Quantity” level); and

Displaying for each trader a token representing the trader at a location in the trading pit.

*Silverman* does not specifically disclose that the trader token position indicates activity level of a trader. *Bernstein* discloses this feature at page 62, “The Pit” and Fig. 5.1. In this case, activity level is interpreted as contract month positions in the pit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the position related activity level of *Bernstein* in the invention of *Silverman* because this would have made clear the traders’ interest in improving an order. As the contract month approached, it would be more likely that exchange activity would increase in an effort to complete a matching of bid and offer.

Applicants have amended to recite activity levels representative of market transactions of a trade, which is disclosed by *Silverman* at Figs. 4 and 5 as bid or offer icons.

### ***Response to Arguments***

Applicant's arguments filed November 10, 2003 have been fully considered but they are not persuasive.

Applicants’ substantive arguments begin at page 14 of the response. Applicants first argue in the third and fourth paragraphs, that *Silverman* does not disclose displaying bid and offer icons. Applicants admit at the last sentence of the third paragraph that “information stored in the databases can be used to generate *displays* at keystations”.

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Applicants' assertion is wrong. At Col. 2, lines 17-28, Silverman specifically discloses that information of bids and offers is used to generate a display. Additionally, Fig. 5 discloses a keystation book of bids and offers, which Silverman specifically discloses as being displayed at Col. 4, line 27 to Col. 5, line 35, particularly Col. 4, line 66 to Col. 5, line 4. Applicants argue that the Figures cited represent only a logical model; the passages cited above show that Silverman displays the information of this model.

Applicant argues that Silverman does not show a vertical axis. At Figs 4 and 5, a vertical axis is specifically disclosed at the left hand side of the figure as "Highest...Lowest".

At page 15 through page 16, Applicants' arguments either restate the previous argument or argue newly claimed limitations.

The rejections are maintained.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kyle whose telephone number is (703) 305-4458. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7687.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



crk

March 3, 2004



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